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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/520,234 | 07/15/2005 | Lars Persson | 930100-2003 | 5101 |

7590 10/16/2006

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EXAMINER

PARKER, FREDERICK JOHN

| | |
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| ART UNIT | PAPER NUMBER |
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1762

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/520,234

Applicant(s)

PERSSON, LARS

Examiner

Frederick J. Parker

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1-4-05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 16,17,31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 16,17,31 are vague and indefinite because it is unclear what is meant by “transforming said image information into a compensated image information”, and the meaning of the associated transferring step as recited; it is further unclear what is intended by distortion in the form of non-uniform stretching of the surface image and how it is carried out in the context of the method.
- Claim 17 is vague and indefinite because it is unclear relative to what the distortion/stretching of the image on the surface is “reduced”.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,2,4,8,9,15 are rejected under 35 U.S.C. 102(b) as being anticipated by Blaylock US 3182103.

Blaylock teaches patternwise electrostatic coating of light bulbs (inherently 3-dimensional) 10, per claim 4, by inserting conductive fluid via nozzle 13 and applying particles through patterned screen 30 to which is applied a voltage, to establish an electrostatic field flux through article 10 to attract a pattern of particles to the article exterior surface (col. 5, 4-42). The source 9 of electricity is activated to form the potential, and therefore is inherently adjustable (col. 3, 12-16).

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

7. Claims 1,2,8,9,11,15 rejected under 35 U.S.C. 102(e) as being anticipated by Sun et al US 6399143 (EFD 6/10/98).

Sun et al teaches to coat substrates having 3-dimensionality with liquid coating particles (inherently having a viscosity, per claim 11) using an electrostatic chuck comprising electrodes. The chuck causes charged images by forming fields longitudinally through and across the substrate mounted thereon (“flux lines”) to cause patternwise deposition of the particles applied onto the substrate.

8. Claims 1,2,4,5,7-9,11-15,18-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharma US 6506456 (EFD 10/29/99).

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Sharma teaches relatively moving a 3-dimensional substrate (col. 6, 34-35) between two spaced apart electrodes which generate a field to apply a spray of charged droplets (inherently having a viscosity, per claim 11) patternwise on the substrate surface facing the applicator. A computer controlled ink jet printer comprising reservoir 35, nozzle/s 36, and charging electrode 37 forms the spray of charged particles. Beneath the substrate is counter electrode 38. The droplet migration on and into the substrate is altered by modifying the strength and /or location of the electrostatic field between the spaced electrodes, per claim 4, so there is inherently a longitudinal flux through and across the substrate. Liquids applied include dyes/ pigments (synonymous with inks) per claim 12. The apparatus comprises ink jet printer 35-37, counter electrode 38, a computer to operably control the printer and the predetermined pattern to be applied (col. 6, 8-21) as well as the electrodes (col. 7, 15-18).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 3,6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma.

Sharma is cited for the same reasons previously discussed, which are incorporated herein. Flux lines through the substrate are shown by Sharma to be approximately 90 degrees relative to the surface, as well as variations inferred by the different relative positions of electrode and counter electrode, per claim 3. While not cited to control application positions by movement of the ink jet printer, it is the Examiner's position that such movement of an ink jet head is common and ordinary knowledge in everyday life as well as in the coating art, such movement relative to a substrate controlling image produced, as would have movement of the counter electrode, per claim 10. Hence the adjustment of relative motions of claim 6 would have been an obvious variation within the purview of one skilled in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sharma by relatively moving the printer and/ or counter electrode relative to the substrate to provide variations in patterns and images applied onto 3-dimensional substrates.

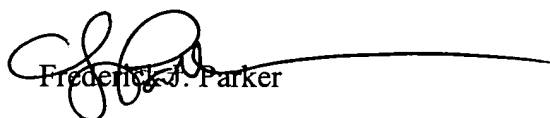
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While the limitations of claims 16,17, and 31 are not understood (and hence rejections under 35 USC 112 above), it is the Examiner's position that since the process of the prior art anticipates or renders obvious Applicants claims, then the apparatus would have been capable of carrying out the limitations of claims 16,17 and 31, and their being carried out would have been an obvious variation to provide improved images.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Frederick J. Parker

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Primary Examiner
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